

IQ Gateway

The IQ Gateway is the platform for energy management and integrates with the IQ Microinverters and IQ Batteries to provide complete control and insights into the Enphase Energy System. The IQ Gateway delivers solar production and energy consumption data to the Enphase App monitoring and analysis software for comprehensive, remote maintenance and management of the Enphase Energy System.



IQ Microinverters with integrated MC4 connectors

Connect PV modules quickly and easily to the IQ Microinverters that has integrated MC4 connectors.



IQ Battery

Enphase

IQ Battery is a fully integrated AC battery system with embedded IQ8X-BAT Microinverters. These are designed for maximum safety, longevity and quick and easy plug-and-play installation. (Available in selected countries only).



IQ Relay single-phase and multi-phase Production and storage, circuit integrated, network and system protection device with PLC-phase coupler (multi-phase) and DC current injection monitoring.*



IQ Cabling

Install microinverters quickly and safely with IQ Cabling. With multi-phase IQ Cabling, the installed capacity is automatically distributed evenly across all three phases.

Smart

- Enables web-based monitoring and control
- Bidirectional communication with IQ Microinverters, IQ Battery and the Enphase Cloud for remote upgrade

Simple

- Easy system configuration using the Enphase Installer App
- Flexible networking with Wi-Fi, Ethernet, or cellular data
- DIN rail mounted

Reliable

- Designed for installation indoors or in an outdoor enclosure
- Five-year warranty



*IQ Relay is not required in all countries, check local grid connection requirements to confirm.

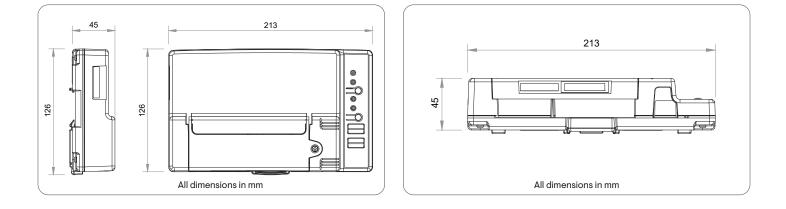
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IQ Gateway

PRODUCT DETAILS	UNITS	ENV-S-WB-230	ENV-S-EM-230
Name		IQ Gateway Standard	IQ Gateway Metered
Description		Communications gateway with basic PV production monitoring (±5%) via PLC	Communications gateway with integrated PV and consumption metering. Includes two CTs (100 A primary circuit current).
Power measurment accuracy		Not supported	Production and consumption meter: ±1% accuracy
POWER REQUIREMENTS	UNITS	ENV-S-WB-230	ENV-S-EM-230
Nominal grid voltage	V	230 (L-N)	230 (L-N), 230/400 (L-N/L-L) Wye
Minimum/Maximum grid voltage	v	184/276	
Nominal frequency	Hz	50	
Minimum/Maximum frequency	Hz	45/55	
Maximum over current protection	А	20 (characteristic B)	
Maximum power consumption	w		5
Average continuous power consumption	W	3	3 or 4 (with Communications kit)
CAPACITY	UNITS	ENV-S-WB-230	ENV-S-EM-230
Maximum number of microinverters polled		Up to 300**	
Maximum number of IQ Battery		Not supported	12 IQ Battery 3T and 4 IQ Battery 10T
MECHANICAL DATA	UNITS	ENV-S-WB-230	ENV-S-EM-230
Dimensions (H × W × D)	mm	126 × 213 × 45	
Mounting		DIN rail	
DIN rail units width	modules	12	
Weight	kg	0.5	
Ambient air temperature range	°C	-40 to 65 (if installed outdoors), -40 to 46 (if installed in an enclosure)	
Relative humidity	%	85	
Overvoltage class AC port		111	
Overvoltage class relay port		П	
Environmental rating		IP30. If installed outdoors, use an outdoor-rated enclosure.	
Maximum altitude	m	2500	
USB ports		Two USB 2.0 ports, auto-sensing, auto-negotiation	
AC terminal block		N, L1 up to 6 mm²	N, L1, L2, L3 up to 6 mm ²
CT terminal block		Not supported	Six double terminals, up to 1.5 mm ²
Digital I/O terminal block		Not supported	Five terminals, up to 1.5 mm ²
COMMUNICATION INTERFACES	UNITS	ENV-S-WB-230	ENV-S-EM-230
Integrated Wi-Fi		802.11b/g/n (2.4 GHz, 5 GHz), for connecting the the Enphase Cloud via the internet.	
Wi-Fi range (recommended)	m	10	
Ethernet		Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud via the internet.	
Mobile Connect		Optional, CELLMODE	M-02 (not included)
Digital I/O		Not supported	Digital input/output for grid operator control***
USB 2.0		For Mobile Connect	For Mobile Connect and Communications kit
Access point (AP) mode		For a connection between the IQ Gateway and a mobile device running the Enphase Installer App	
Metering ports		Not supported	Up to three Consumption CTs, Up to three Production CTs
Power line communication		Power line communication (PLC) 110 - 120 kHz (Class B), narrowband 200 Hz, to microinverters, IQ Relay and ACB 1.5	
Web API		Refer to <u>https://developer-v4.enphase.com</u>	
Local API		Refer to guide for local API	
LED indicators		From top to bottom: Cloud connectivity, Wi-Fi access point mode, PV production state, PLC communications state	

** Depends on geographic location and site configuration. *** Function activated in Germany, Austria, and Switzerland.

COMMUNICATION INTERFACES	UNITS	ENV-S-WB-230	ENV-S-EM-230	
Configured via		Enphase Installer App and Enphase Installer Platform		
STANDARDS	UNITS	ENV-S-WB-230	ENV-S-EM-230	
Grid compliance (with IQ Relay)		TOR Erzeuger Typ A, C10/11, PPDS Annex 4, VFR 2019, VDE-AR-N 4105:2018 CEI 0-21, EN 50549-1, UNE206007-1/2		
Grid compliance (without IQ Relay)		G98, G98 NI, G99, G99 NI, G100		
Safety		EN61010-1:2010	EN 61010-1:2010, EN61010-2:2010	
EMC		IEC/EN 61010-1:2010, EN50065-1, EN61000-4-5, EN61000-6-1, EN61000-6-2		
RED standard		EN62311:2008		
Product labelling		CE, UKCA & RCM		
SCOPE OF DELIVERY	UNITS	ENV-S-WB-230	ENV-S-EM-230	
Package dimensions (H × W × D)	mm	160 × 276 × 98		
Package weight	kg	1		
Aluminium DIN rail	mm	125		
Current Transformers (CTs)		Not supported	Two CT-100-SPLIT-ROW included	



IQ Gateway accessories (order separately)



CELLMODEM-02 Mobile Connect

CT-100-SPLIT-ROW

with accuracy ±1%.

COMMS-24-EXT-01

Current Transformers (CTs)

Cellular modem with five-year data plan for systems up to 60 microinverters.





CT-100-SPLIT Current Transformers (CTs)

Pack of four 200 A rated split-core current transformer (CT), with accuracy $\pm 1\%$. For use with IQ Gateway Metered in multiphase applications or with larger section conductors.

COMMS-KIT-EU-01 Communications kit

Wireless communication adapter for communication with IQ Battery. Includes USB cable for plugging into the IQ Gateway.



Wireless Range Extender Plug-and-play wireless USB dongle used to extend the range of 2.4 GHz wireless network between the IQ Gateway and IQ Battery units.

Pack of four 100 A rated split-core (CT),

For use with IQ Gateway Metered in multi-

main panels with conductors up to 16 mm².

phase applications, designed for smaller

Manufacturer: Enphase Energy, Inc. 47281 Bayside Pkwy. Fremont, CA 94538, The United States of America

Importer: Enphase Energy NL B.V, Het Zuiderkruis 65, 5215MV, 's-Hertogenbosch, The Netherlands

Revision history

REVISION	DATE	DESCRIPTION		
DSH-00011-1.0	May 2023	Initial release of consolidated IQ Gateway Datasheet (IQ Gateway Standard and IQ Gateway Metered)		
Previous releases				